Nonparametric UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	8/2/2013 12:06:53 PM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
mber of Bootstrap Operations	2000

Aroclor

General Statistics

Total Number of Observations	61	Number of Distinct Observations	48
Number of Detects	18	Number of Non-Detects	43
Number of Distinct Detects	17	Number of Distinct Non-Detects	31
Minimum Detect	4.95	Minimum Non-Detect	1.3
Maximum Detect	16.18	Maximum Non-Detect	13
Variance Detects	10.21	Percent Non-Detects	70.49%
Mean Detects	8.466	SD Detects	3.195
Median Detects	7.56	CV Detects	0.377
Skewness Detects	1.236	Kurtosis Detects	0.699
Mean of Logged Detects	2.078	SD of Logged Detects	0.34

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	3.986	Standard Error of Mean	0.548
SD	3.757	95% KM (BCA) UCL	4.833
95% KM (t) UCL	4.902	95% KM (Percentile Bootstrap) UCL	4.889
95% KM (z) UCL	4.888	95% KM Bootstrap t UCL	4.94
90% KM Chebyshev UCL	5.631	95% KM Chebyshev UCL	6.376
97.5% KM Chebyshev UCL	7.41	99% KM Chebyshev UCL	9.442

Suggested UCL to Use

Data appear Gamma, May want to try Gamma Distribution

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
owever, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticia